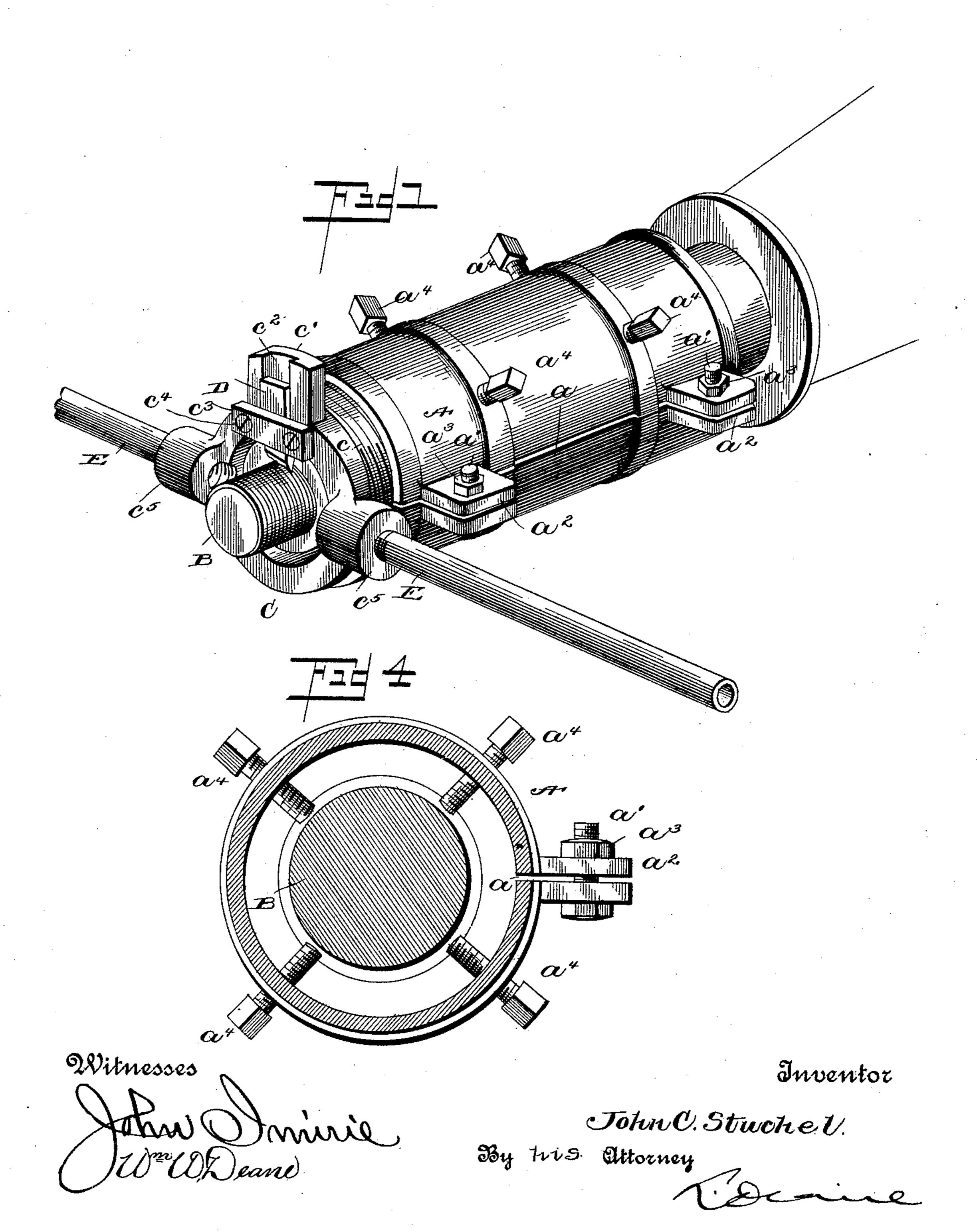
## J. C. STUCHEL. TOOL FOR THREADING AXLES.

No. 481,514.

Patented Aug. 23, 1892.

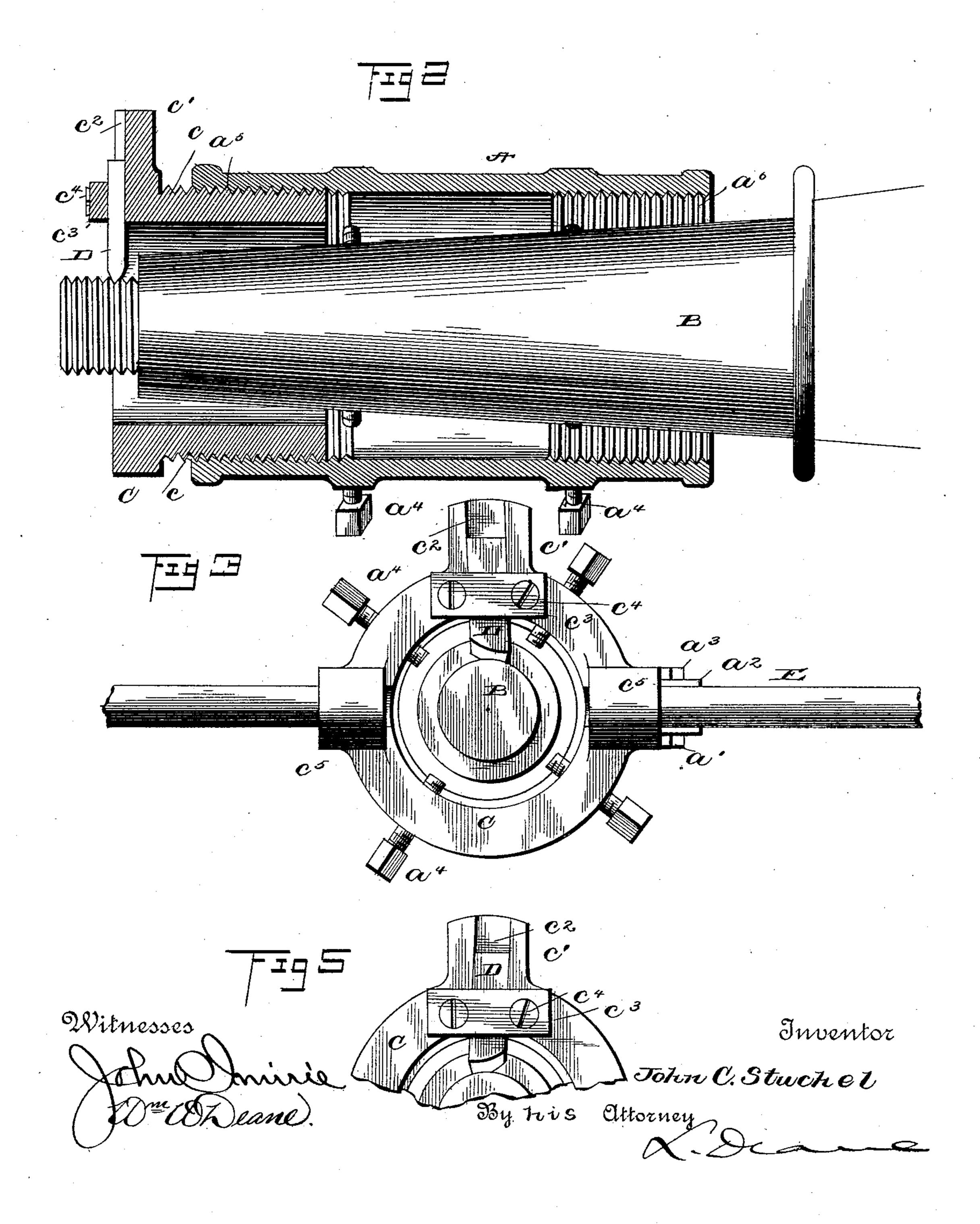


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## United States Patent Office.

JOHN C. STUCHEL, OF INDIANA, PENNSYLVANIA.

## TOOL FOR THREADING AXLES.

SPECIFICATION forming part of Letters Patent No. 481,514, dated August 23, 1892.

Application filed November 12, 1891. Serial No. 411,762. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. STUCHEL, a citizen of the United States, residing at Indiana, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Tools for Threading Axles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Figure 1 is a perspective view of this device or tool. Fig. 2 is a vertical longitudinal section of the same, showing the end of an axle in position within it and the cutting-bit, as in making a screw-thread on the axle end. Fig. 3 is a front end elevation of the tool or device. Fig. 4 is a cross-section detail to show how the tool is centered or rigidly fixed on the shaft. Fig. 5 is a detail to show how the cutting-bit is fixed or adjusted.

This invention relates to improvements in devices for cutting threads on wagon-skeins; and the invention consists in the novel combination and arrangement of parts, all as will be hereinafter set forth and explained, reference being had to accompanying drawings, in which—

A represents a box or case of generally-30 cylindrical form and of suitable size as to length and diameter to fit on the end of the axle B and to take up any wear of the threads of the machine. This case is split at a along its entire length, so that along the edges of this 35 split the two sides can be adjusted in relation to each other to fit the case to the thread of the axles. In this operation the edges along the split a can be brought together as closely as may be necessary by means of headed bolts 40 a', passed through ears  $a^2$  on each side of the split a, and respectively near each end of the case A. These bolts can be screwed up by means of nuts  $a^3$  on the end of them, so as to make the case fit as tightly as desired on the 45 axle. When thus adjusted, the box can rigidly be fixed on the axle by means of the centering screw-threaded bolts  $a^4$ , which pass through the periphery of the case at suitable points around it, substantially as shown in the draw-50 ings, so that said bolts can engage on the dif-

ferent sides of the carriage-axle. Internally

each end of the case is screw-threaded at a<sup>5</sup>

and  $a^6$ . These threads, respectively, are right and left.

The movable part for cutting the screw-55 thread consists of the sleeve C, screw-threaded at c on it inner end of the case or box. In practice I employ two of these sleeves, one for each end, the one having a right-hand screw for the like thread in the case A and the other 60 a left-hand thread for the case.

In a shoulder c' on the outer edge of each sleeve is a guide-slot  $c^2$ , dovetailed or otherwise, in which slot is placed the cutting-bit 65 D, and secured so as to project inwardly as far as may be desired by the clamp  $c^3$ , which can be rigidly fixed upon the bit by means of the screws  $c^4$  at each end, which take into the end of the sleeve. In the ears  $c^5$ , respectively, on the opposite sides of the outer ends of the sleeve are fitted the handles E, by means of which the sleeve can be worked in or out of the end of the case.

In using this device after the case A has 75 been fixed upon the axle, as above described, so that the end of the axle shall project a little beyond its outer end a sleeve having the screw-thread corresponding with that on the projecting end of A is now inserted in A, and 80 being turned around by means of its handles the cutting-bit D will, as soon as it reaches the end b of the axle, begin to cut the screw-thread. This operation will be continued until the end of the axle has been screw-threaded 85 the proper length. When this operation is finished, all the parts can be easily detached from the ends of the axle.

It will be perceived that this device can be used equally as well upon the end of the axle 90 of a carriage as upon the axle detached from the carriage. In the former instance its use will probably be confined to recutting the thread.

This device is a very simple construction, 95 very strong, and very durable. It can be very easily applied, and is capable of doing most efficient service.

Of course it will be understood that I do not limit myself to the special detail of the 100 construction of the device as above described, because, for instance, the box or case could be made in two parts, each held together by threaded bolts. Likewise in the adjustment

in the cutting-bit various mechanical changes can be made without departing from the nature or scope of my invention; likewise in the detail of operating the sleeve.

Having described my invention, I claim—

1. A device for cutting a screw-thread on the end of a vehicle axle or skein, consisting of a box or case having a sleeve movable in and out of its end and internally screw-to threaded at its ends, respectively, right and left, said sleeve carrying a cutting-die and having means for working or rotating it, and said box or case having means to secure it rigidly in position upon the axle, substantially as set forth.

2. A case or box A, split lengthwise at a, provided with means for closing this aperture and having center bolts  $a^4$  at various points through its periphery, and screw-20 threaded internally at its ends, respectively,

right and left, combined with the sleeve C, screw-threaded on the inner end and having in its front end an adjustable cutting-die, and means for rotation in or out of the sleeve.

3. The sleeve C, having attached to it suitable handles to move it and provided with a cutting-die D, adjustably fixed in its forward edge by means of the clamp and screw-threaded on the inner end of its periphery, and combined with the box A, screw-threaded inside at each end to receive a sleeve, all substantially as described.

In testimony whereof I affix my signature in

presence of three witnesses.

JOHN C. STUCHEL.

Witnesses:

JNO. R. CALDWELL, J. A. FINDLEY, M. L. CARNAHAN.